

06/22/09

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80/580946
PCT/JP2005/011131_F260

Substitute Specification
Clean Version

AT 2006-05-30
PCT/PTO 30 MAY 2006

SPECIFICATION

5 [Name of the Invention]

SUBSTRATE TEMPERATURE MEASUREMENT APPARATUS
AND PROCESSING APPARATUS

[Technical Field]

[0001] This invention relates to a substrate temperature measurement apparatus
10 for measuring the temperature of a substrate heated with infrared rays or processed under
plasma generating circumstances, and a processing apparatus provided with the substrate
temperature measurement apparatus.

[Background of the Technique]

15 [0002] For example, when a film is formed or ions are implanted onto a
semiconductor wafer or glass substrate under heated conditions, it is necessary to measure
the temperature of the substrate accurately to control the temperature of the substrate.
Previously thermocouple wires were used for measuring the temperature of the substrate.
For example, a chip is attached to top ends of two thermocouple wires as a temperature
20 measurement contact point in the following patent document:

Patent Document 1: JP58-28536B

[Disclosure of Invention]

[Problem to be solved by the Invention]

25 [0003] The chip contacts with the substrate. Heat is transferred on to the chip from
the substrate. The temperature of the substrate is measured under the heating condition of
infrared rays. The chip absorbs the infrared ray and so the chip is heated. Accordingly the
temperature of the substrate cannot be properly measured.